

**§ 161.006-3 Materials and workmanship.**

(a) *Materials.* The materials shall be of best quality and suitable in every respect for the purpose intended. All materials shall be corrosion resistant. The use of acid flux in making joints shall not be permitted.

(b) *Workmanship.* The workmanship shall be first class in every respect.

**§ 161.006-4 Requirements.**

(a) *Corrosion-resisting materials.* Silver, corrosion-resisting steel, copper, brass, bronze and copper-nickel alloys are considered satisfactory corrosion-resistant materials within the intent of this subpart.

(b) *Searchlight parts.* The motor lifeboat searchlight shall, in general consist of the following parts:

Yoke and pedestal.  
Housing.  
Front door.  
Reflector.  
Lamp socket.  
Supply cable.

(c) *Weight and dimensions.* The height of the motor lifeboat searchlight shall not exceed 19 inches and the weight shall not exceed 16 pounds, unless otherwise approved.

(d) *Wiring.* The motor lifeboat searchlight shall be wired with a five-foot length of rubber-jacketed hard service flexible cord, Underwriters' Laboratories, Inc., Type S, or equivalent, of a size not less than No. 16 AWG. At the point where the cable enters the searchlight, a waterproof entrance bushing with packing gland and cord grip shall be provided.

(e) *Lamp and socket.* The motor lifeboat searchlight shall be provided with a lamp of not less than 80 watts nor more than 100 watts, and a suitable lamp socket. Means shall be provided for adjusting and securing the lamp socket at any position between the focal point and a point not less than ¼ inch away from the focal point in either direction in the axis of the beam.

(f) *Housing.* The housing shall be constructed of brass, Federal Specification QQ-B-611, Composition E, copper alloy, or other suitable corrosion-resistant material as approved, of a thickness not less than No. 20 AWG. The housing shall be capable of free movement of at

least 60 degrees above and 20 degrees below the horizontal, and of a free movement of 360 degrees in a horizontal plane. It shall be possible to lock the barrel in any desired position, vertically or horizontally, without the use of tools. A sturdy metal hand grip shall be provided at the back of the housing for housing-adjusting purposes.

(g) *Front door.* A front door shall be attached to the housing in such a manner that it can be readily opened or removed, without the use of tools, for the purpose of relamping. The door, when closed, shall be waterproof. Clear front door glass shall be used.

(h) *Reflector.* The reflector shall be paraboloidal. It shall be constructed of brass, Federal Specification QQ-B-611 Composition E, finished and with electroplated coatings of nickel and chromium in accordance with ASTM B 456 (incorporated by reference, see § 161.006-1), Service Condition 1, or as otherwise approved. The reflector shall furnish a minimum average illumination of 100 foot candles, when measured as specified in § 161.006-5 (b) (2).

(i) *Yoke and pedestal.* The yoke and pedestal shall be of rugged construction. The pedestal shall be suitable for bolting to a flat surface with not less than four ¾-inch diameter bolts.

(j) *Beam spread.* The beam shall be at least 60 feet in diameter at 200 yards. The edge of the beam shall be defined as a point at which the intensity of the light is 10 percent of the maximum intensity.

(k) *Bolts, nuts, and screws.* Bolts and nuts shall conform to the requirements of Navy Department Specification 43B11. Screws shall conform to the requirements of Navy Department Specification 42S5.

(l) *Name plate.* The motor lifeboat searchlight shall be provided with a permanent metallic name plate giving the name of manufacturer, type designation, and drawing number.

CGFR 49-43, 15 FR 127, Jan. 11, 1950, as amended by USCG-1999-5151, 64 FR 67185, Dec. 1, 1999]

**§ 161.006-5 Sampling, inspections and tests.**

(a) *General.* Motor lifeboat searchlights specified by this subpart are not